

single-family homes, mobile homes, and townhomes. The decrease in impacts is a result of the smaller contours which, as stated previously, is a result of the use of quieter aircraft in the future. All of the impacts are contained within the 60 to 65 DNL noise contour. There are no dwelling units exposed to noise above 65 DNL in 2022. In addition, no noise-sensitive development is contained within the 60 DNL noise contour.

Based on the growth risk analysis, there is the potential for approximately 16 additional residential dwelling units within the 60 DNL noise contour, as presented in **Table 3F**. Of these, 15 potential units exist within the 60-65 DNL, and one is within the 65 to 70 DNL contour. There are no growth risk areas impacted by noise in excess of 70 DNL.

TABLE 3F Noise-Sensitive Land Uses Exposed to 2022 Aircraft Noise Lincoln Airport					
LAND USE	Noise Contour (DNL)				Total
	60-65	65-70	70-75	75+	
<i>DWELLING UNITS</i>					
Existing Dwelling Units	63	0	0	0	63
Future Potential Dwelling Units	<u>15</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>16</u>
Total Dwelling Units	78	1	0	0	79
<i>NOISE-SENSITIVE INSTITUTIONS</i>					
Places of Worship	0	0	0	0	0
Schools	0	0	0	0	0
Other (Library, Museum, Etc.)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Noise-Sensitive Institutions	0	0	0	0	0
<i>HISTORIC RESOURCES</i>					
Total Historic Resources	0	0	0	0	0

POPULATION EXPOSED TO 2022 NOISE

The total existing population exposed to noise above 60 DNL decreases from 1,244 in 2007 to 149 in 2022, which corresponds to a decrease in LWP from 259 to 30. **Table 3G** presents the

impact of 2022 noise on the existing local population.

The entire affected population resides within the 60 to 65 DNL noise contour as no dwellings are contained within the 65 DNL noise contour.

Approximately 38 additional residents could potentially be exposed to noise greater than 60 DNL in 2022. The potential population is found within the

60 to 65 (35) and the 65 to 70 (3) DNL contours. There are no growth risk areas impacted by noise above 70 DNL.

TABLE 3G Population Exposed to 2022 Aircraft Noise Lincoln Airport								
	Noise Contour (DNL)				Total Above 60 DNL		Total Above 65 DNL	
	60-65	65-70	70-75	75+	Residents	LWP	Residents	LWP
Existing Population	149	0	0	0	149	30	0	0
Potential Population	<u>35</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>38</u>	<u>8</u>	<u>3</u>	<u>1</u>
Total Population	184	3	0	0	187	38	3	1

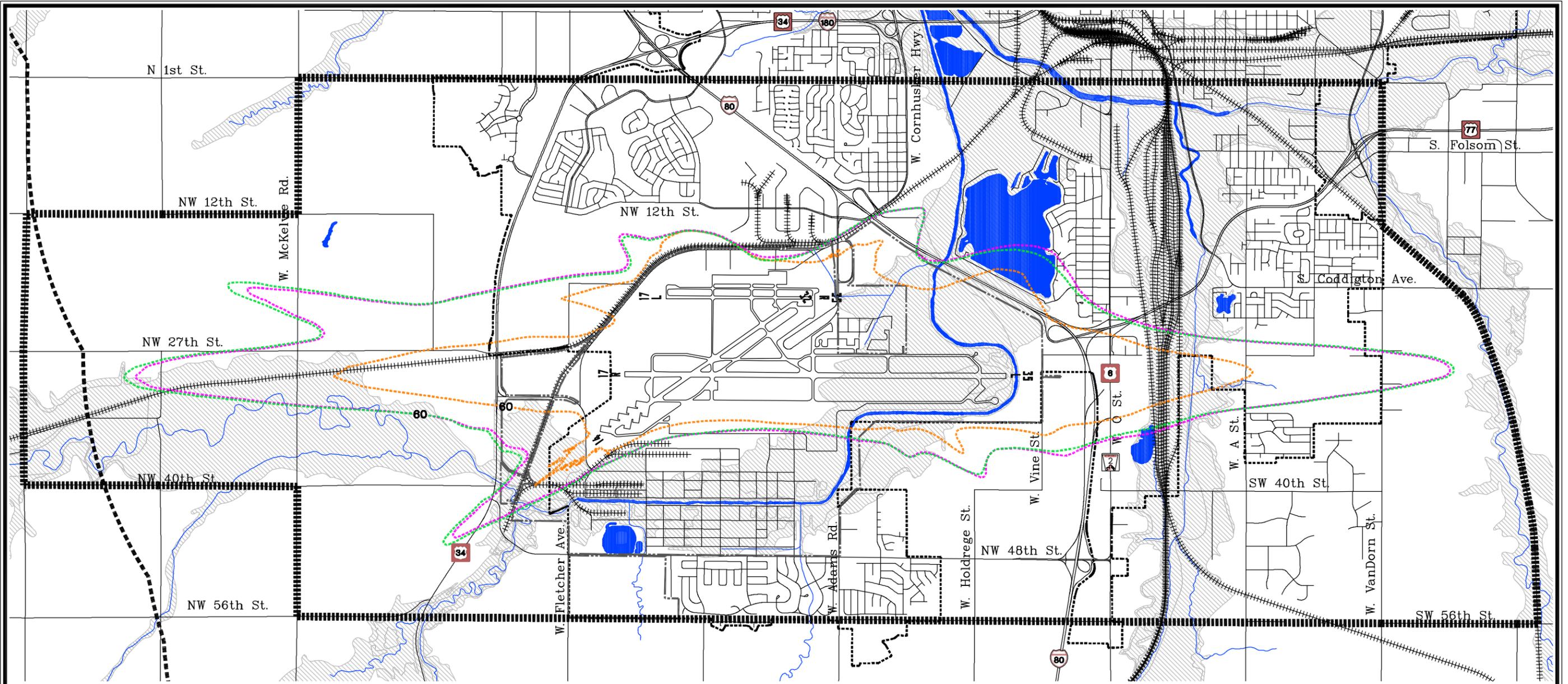
Notes: LWP = Level-weighted population; an estimate of the number of people actually annoyed by aircraft noise. It is derived by multiplying the population in each DNL contour range by the appropriate LWP response factor. The factors used are as follows: 0.205 for 60-65 DNL, 0.376 for 65-70 DNL, 0.644 for 70-75 DNL, and 1.000 for 75+ DNL.
Source: Coffman Associates analysis.

SUMMARY

This chapter has analyzed the impacts of aircraft noise on existing and future land use and population in the vicinity of Lincoln Airport. **Table 3H** summarizes the land use and population impacts.

Exhibit 3H depicts the 2002, 2007, and 2022 60 DNL noise contours for comparative purposes.

Given current zoning, planned land uses, and approved development plans within the study area, there is a potential for a significant amount of future residential development within the various contours in 2007 and 2022.



LEGEND

- Airport Property
- Municipal Boundaries
- Extra-territorial Jurisdiction
- Railroad Tracks
- Study Area
- 2002 Noise Exposure Contour
- 2007 Noise Exposure Contour
- 2022 Noise Exposure Contour
- Floodplains

Source: Base Information and Map:
 City of Lincoln Geographic
 Information System, May 2002.
 Coffman Associates Analysis.



TABLE 3H
Land Uses and Population Impact Summary
Lincoln Airport

	2002	2007	2022
Land Use			
<i>DWELLING UNITS</i>			
Existing Dwelling units	444	527	63
Future Potential Dwelling Units	<u>N/A</u>	<u>1,840</u>	<u>16</u>
Total Dwelling Units	444	2,367	79
<i>NOISE-SENSITIVE INSTITUTIONS</i>			
Places of Worship	0	0	0
Schools	0	0	0
Other (Libraries, Museums, etc.)	<u>0</u>	<u>0</u>	<u>0</u>
Total Noise-Sensitive Institutions	0	0	0
<i>HISTORIC RESOURCES</i>			
Total Historic Resources	0	0	0
Population			
Total Existing Population above 60 DNL	1,048	1,244	149
Total Existing LWP above 60 DNL	219	259	30
Total Potential Population above 60 DNL	N/A	4,342	50
Total Potential LWP above 60 DNL	N/A	894	8
Total Existing Population above 65 DNL	26	24	0
Total Existing LWP above 65 DNL	10	9	0
Total Potential Population above 65 DNL	N/A	22	3
Total Potential LWP above 65 DNL	N/A	9	1
Notes: LWP = Level-weighted population; an estimate of the number of people actually annoyed by aircraft noise. It is derived by multiplying the population in each DNL contour range by the appropriate LWP response factor. The factors used are as follows: 0.205 for 60-65 DNL, 0.376 for 65-70 DNL, 0.644 for 70-75 DNL, and 1.000 for 75+ DNL.			
Source: Coffman Associates analysis.			